## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	
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## ENTERED



**IFWO** 

RAW SEQUENCE LISTING DATE: 01/06/2005
PATENT APPLICATION: US/10/677,983A TIME: 15:57:28

Input Set : A:\Felder39.app

Output Set: N:\CRF4\01062005\J677983A.raw

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3 <110 > APPLICANT: FELDER, ROBIN A.
         JOSE, PEDRO
 6 <120> TITLE OF INVENTION: G PROTEIN-RELATED KINASE MUTANTS IN ESSENTIAL
        HYPERTENSION
 9 <130> FILE REFERENCE: FELDER 3.9-001 CONT DIV
11 <140> CURRENT APPLICATION NUMBER: 10/677,983A
12 <141> CURRENT FILING DATE: 2003-10-02
14 <150> PRIOR APPLICATION NUMBER: 09/614,748
15 <151> PRIOR FILING DATE: 2000-07-12
17 <150> PRIOR APPLICATION NUMBER: PCT/US99/00663
18 <151> PRIOR FILING DATE: 1999-01-12
20 <150> PRIOR APPLICATION NUMBER: 60/071,199
21 <151> PRIOR FILING DATE: 1998-01-12
23 <150> PRIOR APPLICATION NUMBER: 60/098,279
24 <151> PRIOR FILING DATE: 1998-08-28
26 <160> NUMBER OF SEQ ID NOS: 34
28 <170> SOFTWARE: PatentIn Ver. 2.1
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 578
32 <212> TYPE: PRT
33 <213> ORGANISM: Homo sapiens
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45 Ile Glu Lys Asp Tyr Ser Ser Leu Cys Asp Lys Gln Pro Ile Gly Arg
                            55
48 Arg Leu Phe Arg Gln Phe Cys Asp Thr Lys Pro Thr Leu Lys Arg His
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51 Ile Glu Phe Leu Asp Ala Val Ala Glu Tyr Glu Val Ala Asp Asp Glu
54 Asp Arg Ser Asp Cys Gly Leu Ser Ile Leu Asp Arg Phe Phe Asn Asp
               100
                                   105
57 Lys Leu Ala Ala Pro Leu Pro Glu Ile Pro Pro Asp Val Val Thr Glu
                               120
60 Cys Arg Leu Gly Leu Lys Glu Glu Asn Pro Ser Lys Lys Ala Phe Glu
                           135
63 Glu Cys Thr Arg Val Ala His Asn Tyr Leu Arg Gly Glu Pro Phe Glu
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66 Glu Tyr Gln Glu Ser Ser Tyr Phe Ser Gln Phe Leu Gln Trp Lys Trp

Input Set : A:\Felder39.app

Output Set: N:\CRF4\01062005\J677983A.raw

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	Leu	Glu	Ara	Gln		Val	Thr	Lvs	Asn		Phe	Ara	His	Tvr		Vāl
70			5	180				-1-	185			5		190	5	
	Leu	Glv	Lvs		Glv	Phe	Glv	Glu		Cvs	Ala	Cvs	Gln		Ara	Ala
73		1	195	<b>U-</b> 1	<b>-</b> 1		0-1	200		O <sub>I</sub> D		0,0	205			
	Thr	Glv		Met	Tvr	Ala	Cvs		Lvs	Len	Gln	Lvs		Ara	Tle	Lvs
76		210			-1-		215	2,5	<b>1</b> 10	DC u	01	220	<b></b> 70	9	110	<b>1</b>
	Lvs		Lvc	Glv	Glu	Ala		Δla	T.e.11	Δen	G111		Δτα	Tla	T.e.11	Glu
	225	9	Lys	OLY	OIU	230	1100	nια	шси	ASII	235	шуз	nr 9	110	шси	240
		Val	Gln	Ser	Δra	Phe	Val	Val	Ser	T.011		ጥኒያን	2 T 2	Tur	Glu	
82	цуз	VUI	GIII	Der	245	riic	Val	vai	Der	250	AIG	ıyı	AIG	LYL	255	1111
	Lve	Δsn	Δla	T.e.11		Leu	va 1	T.e.11	Thr		Met	Δen	Glv	G] v		T.e.11
85	Lys	r.op	mu	260	Cys	LCu	V 4.1	шси	265	110	nec	ASII	GLY	270	лор	Lea
	Lve	Dhe	Hic		Тут	Asn	T.em	Glv		Pro	Gl v	Dhe	Agn		Gln	Ara
88	цуз	1110	275	110	- 7 -	TO!!	Deu	280	Abii	110	Gry	rne	285	GIU	GIII	AL 9
	Δla	V=1		ጥህም	בומ	Ala	Glu		Cve	Cve	Cl v	T.011		Δαη	T.011	Gln
91	AIG	290	1110	171	AΙα		295	пси	Cys	Cys	Gry	300	GIU	лър	пец	GIII
	λrα		λrα	Tla	Tall	Tyr		λen	T.011	Laze	Dro		λαη	Tla	Lau	T OU
	305	GIU	Arg	116	val	310	Arg	Asp	neu	цуз	315	GIU	ASII	116	пеп	320
		\ en	) ra	Cl v	uic	Ile	Ara	Tla	Car	λαn		Clar	Lou	λla	Thr	
97	мэр	vob	Arg	GIY	325	116	Arg	116	SEL	330	пеп	Gry	пеп	Ата	335	Giu
	тъ	Dro	Glu	Glv		Arg	V-1	λνα	Gly		T/a l	Gl <sub>3</sub>	Thr	tta 1		Tree
100		FIO	GIU	340		Arg	val	Arg	345	_	var	GIY	1111	350	_	IYI
		. ברב	Dro			7727	λcr	λer			Tarr	Thr	Dhe			Asp
103		. AIC	355		ı vaı	. vai	ASI.	360		груг	, I Y I	1111	365			, wab
		ነ ጥንተ			. Glu	r Cve	T. <b>-</b> 11			- G11	Met	Tle			, Hic	Ser
106		370	_	, ncc	CLY	Cys	375		. Iyi	. GIL	riec	380		. 61)	1112	, Der
				Tare	. Тъг	Tare			. Wal	Taze	. Тт			\ \\alpha \	Acr	Gln
	385		. <u> </u>	, 2,5	, - , -	390		. Dy.	, , ,	. шу.	395		. OIU	· vai	. ADL	400
			T.vc	. Asn	Δgr			G1v	1 TV27	. Ser			Dhe	Ser	- G]1	Asp
112	_	,	. <u> </u>	, 1101	405		010	· Ort		410		. Lys		. DCI	415	_
		Tivs	Ser	· Tle			Met	T.e.	ı T.eı			Asn	Pro	Ser		Arg
115		. –,.	,	420	_	, ,,,,			425					430	_	, ,,,,
		Gla	, Cvs			, Glu	Glv	γAla			. Vál	Lvs	Gln			Val
118		,	435		,1	0_0	<u> </u>	440					445			, ,,,
		Lvs			Asn	Phe	Aro			Glu	ı Ala	Asn			ı Glı	Pro
121		450	_				455		,	. 0_0		460				
				Pro	Asp	Pro			. Val	Tvr	Cvs			Val	Lei	Asp
	465		1			470				-1-	475	_				480
			Glr	. Phe	Ser			Lvs	Glv	Ile			Asp	Thr	Ala	Asp
127					485			-1-		490					495	
		Asr	Phe	Tvr			Phe	Ala	Thr			Val	Ser	. T1e		Trp
130				500					505	_	-7-			510		
		Asr	Glu			Glu	Ser	Glv			Lvs	Asp	Ile			Ser
133			515					520			-1	<u>F</u>	525		-2-	
		Ser			Ala	Len	Pro			Len	Asn	Lvs			His	Thr
136		530				~	535		<u>F</u>			540				
	Pro			- 70	. D~o	7.00			. Dha	Dha				Dha		. 7
		, vai	. טכב	. ALU	PIC	WOII	ALG	L GT A	Life	: Pme	: TAT	Aro	ьeu	PHE	Arc	ALG
139	545		. Der	Arg	PIO	550	_	GIY	PHE	PHE	555 :	_	ьeu	PILE	Arg	560

Input Set : A:\Felder39.app

Output Set: N:\CRF4\01062005\J677983A.raw

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325
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226 Ala Lys Ser Ile Cys Arg Met Leu Leu Thr Lys Asn Pro Ser Lys Arg
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278 Arg Leu Phe Arg Gln Phe Cys Asp Thr Lys Pro Ile Leu Lys Arg His
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287 Lys Leu Ala Ala Pro Leu Pro Glu Ile Pro Pro Asp Val Val Thr Glu
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Input Set : A:\Felder39.app

Output Set: N:\CRF4\01062005\J677983A.raw

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288	<b>~</b>	3	115	<b>a</b> 1	T	T	<b>a1</b>	120	*	D	0	T	125	27-	Dl	<b>a</b> 1
	Cys		Leu	GIY	Leu	ьys		GIU	ASI	Pro	ser		гуѕ	Ala	Pne	GIU
291	~7	130	<b></b> 1				135		_	_		140	<b>~</b> 3	_	_,	~-7
		Cys	Thr	Arg	Val		His	Asn	Tyr	Leu	_	GLY	GIu	Pro	Phe	
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	Glu	Tyr	Gln	Glu	Ser	Ser	Tyr	Phe	Ser	Gln	Phe	Leu	Gln	Trp	Lys	$\mathtt{Trp}$
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300				180					185					190		
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303			195					200					205			
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306		210					215					220				
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311	Lys	Val	Gln	Ser	Arg	Phe	Val	Val	Ser	Leu	Ala	Tyr	Ala	Tyr	Glu	Thr
312					245					250					255	
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320	Ala	Val	Phe	Tyr	Ala	Ala	Glu	Leu	Cys	Cys	Gly	Leu	Glu	Asp	Leu	Gln
321		290		_			295		•	•	-	300		-		
323	Arq	Glu	Arq	Ile	Val	Tyr	Arq	Asp	Leu	Lvs	Pro	Glu	Asn	Ile	Leu	Leu
	305					310		•		•	315					320
326	Asp	qaA	Arq	Glv	His	Ile	Ara	Ile	Ser	Asp		Glv	Leu	Ala	Thr	
327	•	-		- 4	325					330		2			335	
	Ile	Pro	Glu	Glv	Gln	Ara	Val	Ara	Glv		Val	Glv	Thr	Val		Tvr
330				340		5		5	345	5		1		350	1	-1-
	Met	Ala	Pro		Val	Val	Asn	Asn	-	Lvs	Tvr	Thr	Phe		Pro	Asp
333			355					360		-1-	- 1 -		365			E
	Trp	Tro		Leu	Gly	Cvs	Leu		Tvr	Glu	Met.	Ile		Glv	His	Ser
336		370	1		1	-1-	375		-1-			380	<b></b>	<b>4-</b> 1		
	Pro		Lvs	Lvs	Tyr	Lvs		Lvs	Val	Lvs	Tro		Glu	٧al	Asp	Gln
	385		-1-	-1-	-1-	390		-1-		-1-	395					400
		Ile	Lvs	Asn	Asp		Glu	Glu	Tvr	Ser		Lvs	Phe	Ser	Glu	
342	5		-1-		405				-1-	410	<b></b>	10			415	1105
	Δla	Lvs	Ser	Tle	Cys	Ara	Met	Len	Len		Lvs	Agn	Pro	Ser		Ara
345		_,_		420	0,0	••••		<b></b>	425		2,5	11011		430	-75	
	T.e11	Glv	Cvs		Glv	Glu	Glv	Δla		Glv	Val	Lvc	Gln		Pro	Val
348	Deu	O <sub>T</sub> y	435	9	OLY	Olu	Cly	440	niu	Oly	vai	цуз	445	1113	110	Val
	Dho	Larg		Tla	Asn	Dhe	7 ~~	-	Lou	Glu	ת דת	λan		Tou	Cl.	Dro
351	FIIC	450	rap	116	USII	FITE	455	Arg	пец	Giu	Ата	460	Mec	пеп	GIU	PIO
	Dro		C	Dwo	Asp	Dwa		71-	T/al	П	C		7 ~~	7707	T 0	7 ~~
		FIIE	Cys	PIO	Asp		птэ	міа	vaı	TYL		гуѕ	Asp	vai	Leu	
354		C1	C1 ~	Dha	C.~	470	τ <i>τ</i> - 1	T	C1	т1 -	475	T	7	mh	77-	480
357	TTE	GIU	GIII	FIIE	Ser	AId	vaı	пЛя	GIÀ		TAI	ьeu	Asp	IIII		ASD
	<b>a</b> 1	7	nh -	Пь	485	7	Dk -	77-	ml	490	<b>C</b>	11- 3	0	<b>-</b> 7 -	495	m
	GIU	Asp	Fue		Ala	arg	rne	Ата		GTĀ	cys	val	ser		Pro	Trp
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VERIFICATION SUMMARY

DATE: 01/06/2005

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